Attorney Docket No. 38-21(52949)B *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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/Tina Lafser/

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In re application of:	Judith C. Donovan et al.		
PCT Application No.:	PCT/US2004/042611	Examiner:	Anne R. Kubelik
IA Filing Date:	December 14, 2004		
371 Application No.:	10/581,763		
371 Filing Date:	August 7, 2007		
		Art Unit No.:	1638
For:	SECRETED INSECTICIDAL PROTEIN AND GENE COMPOSITIONS FROM BACILLUS THURINGIENSIS AND USES THEREFOR	CONF. NO.:	6571

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Reply to Office Action Requiring Election/Restriction Mailed January 12, 2009

This paper is filed in response to the above captioned Official Action, along with a petition for an extension of time of four months and the authorization for the Office to deduct the requisite fees for such petition and fees associated with this response from Applicant Monsanto Company's USPTO Deposit Account 13-4125. Claims 1-20 as originally filed are pending in this case. Therefore, it is believed that this paper is timely filed.

The Examiner has required that the Applicant restrict the claimed subject matter to a single invention, asserting that the claims as filed correspond to forty separately patentable inventions. The Applicant respectfully traverses this rejection, and provisionally elects group XI, claims 8-9 an d12-13, drawn to a protein of SEQ ID NO:4.

The Examiner asserts that the claims fail to relate to a single general inventive concept because they lack the same or corresponding special technical features. The Examiner further asserts that the

special technical feature linking the claims appears to be a polynucleotide that encodes a Bt insecticidal toxin protein, and recites a reference by Schnepf et al (US Patent No. 6,107,278 issued August 22, 2000) in support of teaching polynucleotides encoding Bt insecticidal toxin proteins. The Examiner admits that there is a technical feature linking the inventions of Groups I-XL but indicates that the technical feature linking the inventions does not constitute a special technical feature as defined by PCT Rule 13.2.

The Examiner's reasoning is flawed in that PCT Rule 13.1 does not merely recite that the application is to be limited to one invention only, but further recites that the application may exhibit unity of invention if the claimed subject matter relates to a "group of inventions so linked as to form a single general inventive concept". PCT Rule 13.2 then recites the circumstances in which the unity of invention requirement is to be considered fulfilled. Specifically, 13.2 specifies that a group of inventions fulfills the unity requirements when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The special technical features are defined as "those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art".

In this case, using the problem-solution approach, the problem to be solved is the identification of polynucleotides encoding proteins that are different from those presently available in the art that exhibit toxic effects upon lepidopteran pests of plants, as well as the use of those proteins to control plant lepidopteran pest infestations when used alone or in combinations with other agents known to be insecticidal to these plant pest species. See for example, a summary of this problem to be solved as set forth in numbered paragraph 74 of the specification as filed. That same paragraph describes that the present invention provides polynucleotides encoding lepidopteran toxic proteins that are all related to each other in terms of percent identity and the fact that these are all found as secreted proteins in the culture supernatants of various cultures of purified Bacillus thuringiensis strains of bacteria. Thus, the application exhibits unity because the claimed subject matter relates to a "group of inventions so linked as to form a single general inventive concept", the concept of providing additional proteins that are different from those known in the art, proteins that are closely related to each other and not related to other proteins known in the art, and which are proteins that all exhibit substantially the same insecticidal activity to lepidopteran species that are pests of plants.

Furthermore, these groups of inventions, i.e., the several proteins set forth in the application, as well as polynucleotides encoding these proteins, fulfills the unity requirement because there is a technical relationship among these inventions that involves one or more of the same or corresponding special

technical features. These genes, and the proteins encoded by these genes, their lack of relationship to other proteins and genes known in the art, and their use in plants to control insect pest infestations, define the contribution which each of these claimed inventions, when considered as a whole, makes over the prior art. Thus, in view of these reasons, the proteins and the genes encoding these proteins, the plants transformed with nucleotide sequences encoding these proteins, seed produced from such plants that also contain these coding sequences, and the various other inventions recited as separately patentable inventions in the office action as Inventions No. I-XL, all exhibit unity of invention under PCT Rule 13.1 and 13.2, and should be examined together. Therefore, it is respectfully requested that the Examiner reconsider her requirement for restriction based on the arguments presented herein, and withdraw the requirement and prosecute the claims on the merits.